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09/766,142	01/19/2001	William D. Evans	D/A0A87	1295

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EXAMINER

HOFFMAN, BRANDON S

ART UNIT PAPER NUMBER

2136

DATE MAILED: 10/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

*[Handwritten signature]*

<b>Office Action Summary</b>	Application No. 09/766,142	Applicant(s) EVANS, WILLIAM D.	
	Examiner Brandon Hoffman	Art Unit 2136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1)  Responsive to communication(s) filed on \_\_\_\_\_.
- 2a)  This action is **FINAL**.                      2b)  This action is non-final.
- 3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4)  Claim(s) 1-42 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5)  Claim(s) \_\_\_\_\_ is/are allowed.
- 6)  Claim(s) 1-42 is/are rejected.
- 7)  Claim(s) \_\_\_\_\_ is/are objected to.
- 8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9)  The specification is objected to by the Examiner.
- 10)  The drawing(s) filed on 29 January 2001 is/are: a)  accepted or b)  objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All    b)  Some \*    c)  None of:
    - 1.  Certified copies of the priority documents have been received.
    - 2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    - 3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1)  Notice of References Cited (PTO-892)
- 2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5)  Notice of Informal Patent Application (PTO-152)
- 6)  Other: \_\_\_\_\_.

## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because of the following informalities:
  - On page 2, line 15, "my" should be –by–.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claims 11, 12, 25, and 26 recite the limitation "the object language" in the first line of each respective claim. There is insufficient antecedent basis for this limitation in the claim. However, for examination purposes, Examiner treats the rejected claims as being dependent upon claims 3 and 17.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
5. Claim 34 is rejected under 35 U.S.C. 102(b) as being anticipated by Carter (U.S. Patent No. 5,787,175).

Regarding claim 34, Carter teaches a method for creating a document with secure annotations, comprising:

- Providing an electronic document (fig. 4, ref. num 54,90);
- Providing an annotation pertaining to the electronic document (fig. 10, ref. num 176);
- Encrypting the annotation using an encryption key associated with a user generating the annotation, wherein access to the encrypted annotation is available to users having access to the annotation encryption key (fig. 10, ref. num 180 and 182 and col. 20, lines 51-65); and
- Associating the encrypted annotation with the electronic document such that access to electronic document is provided to at least one user and access to the encrypted annotation is provided only to users having the annotation encryption key (fig. 11, ref. num 192).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-33 and 35-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carter (USPN '175) in view of Follendore, III (U.S. Patent No. 6,011,847).

Regarding claims 1, 15, and 31, Carter teaches a [secure content object] method/system for protecting an electronic document, comprising:

- Encrypting the electronic document using a document encryption key (fig. 6, ref. num 112 and col. 13, lines 4-17);
- Generating a multi-key encryption table for use in a multi-key encryption method, the table comprising at least one multi-key component (fig. 6, ref. num 114, 116, and 118 and col. 13, line 18 through col. 14, line 22);
- Associating a user interface device with the encrypted header, the multi-key encryption table and the encrypted electronic document, wherein the user interface device comprises unencrypted information for identifying the electronic document and an interactive element for enabling a user to input a user authorization for access to at least a portion of the encrypted electronic document (fig. 9, ref. num 152 and col. 16, lines 16-29); and
- Combining the user authorization with each of the stored multi-key components in the multi-key encryption key table to decrypt the encrypted header (fig. 9, ref. num 160 and 162 and col. 16, line 60 through col. 17, line 26).

Carter does not teach generating an encrypted header comprising information pertaining to the electronic document or upon a valid decryption of the encrypted header, decrypting the portion of the encrypted electronic document.

Follendore, III teaches generating an encrypted header comprising information pertaining to the electronic document (fig. 2, ref. num 224 and col. 1, lines 22-25); and upon a valid decryption of the encrypted header, decrypting the portion of the encrypted electronic document (fig. 2, ref. num 242).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine generating an encrypted header comprising information pertaining to the electronic document and upon valid decryption of the header, decrypting the encrypted electronic document, as taught by Follendore, III, with the method/system of Carter. It would have been obvious for such modifications because a header defines the data portion of the document. When the header is decrypted, a decryption key contained in the header for decrypting the document allows the key to be transmitted safely.

Regarding claims 2, 16, and 32, the combination of Carter in view of Follendore, III teaches wherein the encrypted header includes an encryption marker comprising a random number sequence followed by a derivable variation of the same random number sequence, wherein a valid decryption of the encryption marker indicates that the document encryption key has been found (see fig. 2, ref. num 230, 232, and 234 Follendore, III).

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Regarding claims 3 and 17, the combination of Carter in view of Follendore, III teaches wherein the electronic document comprises content information that is formatted based on an object language having a set of formatting rules (see col. 8, lines 17-26 of Carter).

Regarding claims 4 and 18, the combination of Carter in view of Follendore, III teaches wherein the user interface device comprises a second electronic document (see col. 5, lines 34-39 of Follendore, III).

Regarding claims 5 and 19, the combination of Carter in view of Follendore, III teaches wherein the information pertaining to the electronic document comprises a user permission table for access to all or portions of the electronic document and wherein only those permitted portions of the electronic document are decrypted (see col. 8, lines 51-59 of Carter).

Regarding claims 6 and 20, the combination of Carter in view of Follendore, III teaches wherein the encrypted header and the encrypted electronic document are encrypted using different encryption keys and wherein the multi-key encryption table includes at least one multi-key component for each encryption key (see fig. 4, ref. num 428, 430, 432, and 434 of Follendore, III).

Regarding claims 7 and 21, the combination of Carter in view of Follendore, III teaches wherein the encrypted header further comprises a fingerprint for identifying some predefined aspect of the electronic document (see fig. 2, ref. num 230, 232, and 234 of Follendore, III).

Regarding claims 8 and 22, the combination of Carter in view of Follendore, III teaches wherein the electronic document comprises a plurality of individual electronic documents and the encrypted header comprises information pertaining to each of the individual electronic documents (see col. 9, lines 44-49 of Carter).

Regarding claims 9 and 23, the combination of Carter in view of Follendore, III teaches wherein the information pertaining to the electronic document comprises a user permission table setting forth access to all or portions of each of the individual electronic documents and wherein only those permitted portions of the authorized electronic document are decrypted (see col. 8, lines 51-59 of Carter).

Regarding claims 10 and 24, the combination of Carter in view of Follendore, III teaches wherein the content information is selected from the group consisting of text, graphics, equations, tables, spreadsheets, pictures, video files, audio files, multimedia files and binary data of unknown format (see col. 8, lines 17-26 of Carter).



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Regarding claims 11 and 25, the combination of Carter in view of Follendore, III teaches wherein the object language comprises Adobe Acrobat (see col. 8, lines 17-26 of Carter).

Regarding claims 12 and 26, the combination of Carter in view of Follendore, III teaches wherein the object language comprises a language which interprets Microsoft Word documents (see col. 8, lines 17-26 of Carter).

Regarding claims 13 and 27, the combination of Carter in view of Follendore, III teaches wherein the encrypted header includes an encryption marker comprising a random number sequence followed by a derivable variation of the same random number sequence, wherein a valid decryption of the encryption marker indicates the header encryption key has been found (see fig. 2, ref. num 230, 232, and 234 Follendore, III); and wherein the encrypted electronic document includes an encryption marker comprising a random number sequence followed by a derivable variation of the same random number sequence, wherein a valid decryption of the encryption marker indicates the document encryption key has been found (see fig. 2, ref. num 234, 236, and 238 of Follendore, III).

Regarding claims 14, 28, and 33, the combination of Carter in view of Follendore, III teaches wherein the electronic document includes a document ID and wherein the document encryption key includes a combination of the document ID, the user

information and the multi-key components, for each authorized user (see fig. 4, ref. num 92 and 96 and col. 13, line 63 through col. 14, line 5 of Carter).

Regarding claim 29, the combination of Carter in view of Follendore, III teaches wherein the electronic document comprises a first electronic document and an annotation associated therewith, wherein the annotation is encrypted using an encryption key associated with a user generating the annotation (see fig. 10, ref. num 176, 180 and 182 and col. 20, lines 51-65 of Carter); and wherein the encrypted header includes information pertaining to the first electronic document and the annotation (see col. 9, lines 56-61 of Follendore, III).

Regarding claim 30, the combination of Carter in view of Follendore, III teaches wherein the multi-key encryption table is located remote from the user interface device (see col. 8, lines 27-39 of Carter).

Regarding claim 35, Carter teaches a method for creating a document with secure annotations, comprising:

- Providing an electronic document, wherein access to the electronic document is available to a first set of users (fig. 4, ref. num 54,90);
- Generating a plurality of annotations pertaining to the electronic document using the document language (fig. 10, ref. num 176);

- Encrypting each annotation using an annotation encryption key associated with a user generating the particular annotation, wherein access to an encrypted annotation is available to users having access to the respective annotation encryption key (fig. 10, ref. num 180 and 182 and col. 20, lines 51-65);
- Associating the second electronic document with the electronic document such that access to the electronic document is available to the first set of users and access to the encrypted annotations in the separate file is provided only to users having the required encryption keys (fig. 11, ref. num 192).

Carter does not teach concatenating the plurality of encrypted annotations in a second electronic document.

Follendore, III teaches concatenating the plurality of encrypted annotations in a second electronic document (fig. 2, ref. num 224).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine concatenating the annotations in a second document, as taught by Follendore, III, with the method/system of Carter. It would have been obvious for such modifications because the annotations can become many for only one file. By combining the annotations into their own electronic document, they can be handled on their own with their own keys separate from the electronic document.

Regarding claim 36, the combination of Carter in view of Follendore, III teaches further comprising the step of merging the second electronic document and the electronic document into a third electronic document (see fig. 2, ref. num 222 and 224 contained within 218 of Follendore, III).

Regarding claim 37, the combination of Carter in view of Follendore, III teaches further comprising the step of encrypting the first electronic document using a document encryption key, wherein access to the encrypted electronic document is provided only to users having the required encryption key (see fig. 6, ref. num 112 and col. 13, lines 4-17 of Carter).

Regarding claim 38, the combination of Carter in view of Follendore, III teaches further comprising adding an unencrypted header identifying the generating user to each encrypted annotation (see fig. 2, ref. num 220 of Follendore, III).

Regarding claim 39, the combination of Carter in view of Follendore, III teaches further comprising, for each annotation encryption key:

- Generating a multi-key encryption table for use in a multi-key encryption method, the table comprising at least one multi-key component (see fig. 6, ref. num 114, 116, and 118 and col. 13, line 18 thru col. 14, line 22 of Carter);

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- Providing a user interface for enabling a user to input a user authorization for access to at least a portion of an encrypted annotation (see fig. 9, ref. num 152 and col. 16, lines 16-29 of Carter);
- Combining the user authorization with each of the stored multi-key components in the multi-key encryption key table to decrypt the annotation, wherein valid decryption of the annotation indicates the correct annotation encryption key has been found (see fig. 11, ref. num 192 of Carter).

Regarding claim 40, the combination of Carter in view of Follendore, III teaches further comprising, for each annotation encryption key:

- Generating a multi-key encryption table for use in a multi-key encryption method, the table comprising at least one multi-key component, wherein each annotation includes an encrypted header (see fig. 6, ref. num 114, 116, and 118 and col. 13, line 18 thru col. 14, line 22 of Carter and fig. 2, ref. num 224 of Follendore, III);
- Providing a user interface for enabling a user to input a user authorization for access to at least a portion of the encrypted annotation (see fig. 9, ref. num 152 and col. 16, lines 16-29 of Carter);
- Combining the user authorization with each of the stored multi-key components in the multi-key encryption key table to decrypt the encrypted header (see fig. 9, ref. num 160 and 162 and col. 16, line 60 through col. 17, line 26 of Carter); and
- Upon a valid decryption of the encrypted header, decrypting the portion of the encrypted annotation (see fig. 2, ref. num 242 of Follendore, III).

Regarding claim 41, the combination of Carter in view of Follendore, III teaches wherein the encrypted header includes an encryption marker comprising a random number sequence followed by a derivable variation of the same random number sequence, wherein a valid decryption of the encryption marker indicates the annotation encryption key has been found (see fig. 2, ref. num 230, 232, and 234 Follendore, III).

Regarding claim 42, the combination of Carter in view of Follendore, III teaches wherein the separate file and the electronic document are stored in different locations (see col. 9, lines 37-43 of Follendore, III).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon Hoffman whose telephone number is 703-305-4662. However, my new office number will be 571-272-3863 after our October 25 move. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 703-305-9648. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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